

## Research Briefs

April 30, 2021



### [A Tale of Two Modalities: Sign and Speech Influence Each Other in Bimodal Bilinguals](#)

*Francie Manhardt, Susanne Brouwer, and Asl Özyürek*

*Psychological Science*

Sign and speech appear to influence each other in bimodal bilinguals—hearing individuals who are fluent in both a sign language and a spoken language. In this experiment, when compared with hearing participants who did not know sign language, bimodal bilinguals showed the influence of sign language in their speech by expressing more specific information about the physical features of objects. Similarly, the bimodal bilinguals showed influence from speech in their signing by using fewer signs that conveyed information specific to sign language than deaf participants. Thus, exposure to both languages might enrich spoken language, which could be important for children with cochlear implants.

## **Preregistered Replication of “Feeling Superior Is a Bipartisan Issue: Extremity (Not Direction) of Political Views Predicts Perceived Belief Superiority”**



*Elizabeth A. Harris and Jay J. Van Bavel*

*Psychological Science*

Toner and colleagues (2013) found that conservatives were more dogmatic than liberals, but both conservatives and liberals with extreme beliefs perceived their beliefs as superior to those of others. Harris and Van Bavel replicated these findings and verified that extremism varied by topic. However, the researchers also found that regardless of political beliefs, people with more extreme views also had higher dogmatism. These findings support the idea that dogmatism, extremism, and feelings of superiority appear to depend more on topic than on political view. Thus, researchers assessing differences between conservatives and liberals should study diverse topics.

## **Misogynistic Tweets Correlate With Violence Against Women**



*Khandis R. Blake, Siobhan M. O’Dean, James Lian, and Thomas F. Denson*

*Psychological Science*

Misogynistic tweets in different areas across the United States appeared to be related to domestic violence in those areas. Blake and colleagues tracked misogynistic tweets in more than 400 areas and the incidents of domestic and family violence reported to the FBI in the same areas. Misogynistic tweets were a significant predictor of future domestic and family violence, which is perpetrated against women in more than 70% of the cases. Although these findings do not suggest that misogyny on social media causes violence against women, they do suggest that expressing prejudice against women tends to co-occur with domestic violence.

## **Twin Differences in Harsh Parenting Predict Youth’s Antisocial Behavior**

*S. Alexandra Burt, D. Angus Clark, Elizabeth T. Gershoff, Kelly L. Klump, and Luke W. Hyde*

*Psychological Science*

Harsher parenting (e.g., hitting children) appears to be associated with children’s antisocial behavior

(e.g., aggression, rule breaking) via environmental transmission rather than genetic transmission. In two samples of twins, the twin exposed to more harsh parenting tended to display more antisocial behaviors, even when genetics was held constant (i.e., in monozygotic twin comparisons). These findings suggest that harsh parenting, including physical punishment, may increase children's antisocial behavior for nongenetic reasons, and are consistent with policies aimed at reducing physical punishment.

## **The Dramatic Impact of Explicit Instruction on Learning to Read in a New Writing System**



***Kathleen Rastle, Clare Lally, Matthew H. Davis, and J. S. H. Taylor***

*Psychological Science*

Explicitly teaching writing regularities might help learners more than letting them discover those regularities by themselves, this study suggests. Over 10 days, adults learned to read novel words printed in two artificial language systems. One group learned spelling-to-sound and spelling-to-meaning mapping through experience (i.e., by reading the novel words), and another group received explicit instruction about those regularities before reading the words. Almost all the participants who received the instruction were able to generalize the regularities in the novel words, whereas only 25% of the participants who learned through experience were able to do so.

## **Attitudes Based on Feelings: Fixed or Fleeting?**



***Matthew D. Rocklage and Andrew Luttrell***

*Psychological Science*

In seven studies, including analyses of real-world online reviews, Rocklage and Luttrell found that attitudes based on emotion are relatively fixed. The more emotional participants' opinions about brands or gifts were, the less their opinions changed over time. This effect was more pronounced for positive opinions than for negative opinions. In addition, persuasive messages that evoked emotions were more likely to create persisting attitudes. These findings highlight how emotion may increase support for issues, individuals, or products.

## **Adolescents' Stress Reactions in Response to COVID-19 Pandemic at the Peak of the Outbreak in Italy**

***Annalaura Nocentini, Benedetta Emanuela Palladino, and Ersilia Menesini***

*Clinical Psychology Science*

In Italy, stress at the peak of the COVID-19 pandemic was measured at high levels regardless of respondents' geographical location. Nocentini and colleagues surveyed 5,295 Italian adolescents and found that 28.9% of them showed moderate to high stress reactions, with older adolescents and females showing more stress than younger or male adolescents. The stress responses did not appear to depend on whether the adolescents' region was more or less affected by the pandemic. However, both direct experience with COVID-19 and indirect experience, via a friend or an acquaintance who was infected, were associated with stress reactions.

## **Daily Life Positive Events Predict Well-Being Among Depressed Adults 10 Years Later**

***Vanessa Panaite, Andrew R. Devendorf, Todd B. Kashdan, and Jonathan Rottenberg***

*Clinical Psychological Science*

Higher daily positive affect and positive interactions with other people appear to predict higher psychological well-being among people with depression. For 8 consecutive days, participants with depression reported fewer positive events, higher negative affect, and lower positive affect than participants without depression. However, those who reported higher daily positive affect, lower negative affect, and more social time were more likely to report higher well-being (e.g., life satisfaction, autonomy). These participants were also more likely to report higher well-being 10 years after the daily assessment.

## **A Detailed Hierarchical Model of Psychopathology: From Individual Symptoms up to the General Factor of Psychopathology**

***Miriam K. Forbes et al.***

*Clinical Psychological Science*

Forbes and colleagues analyzed the structure of symptoms in an American clinical sample and an Australian general population sample. The symptoms spanned 18 disorders described in the *Diagnostic and Statistical Manual of Mental Disorders (DSM)*. Results indicated similarities between the two samples and a hierarchical structure of psychopathology organized into symptoms, syndromes, sub-subfactors, subfactors, spectra, and a general factor of psychopathology. In this model, both symptom-level data and higher-order dimensions departed from the diagnostic categories described in the *DSM*. These findings may help to improve methods in clinical research and practice.

## **Disrupted Salience and Cingulo-Opercular Network Connectivity During Impaired Rapid Instructed Task Learning in Schizophrenia**

***Julia M. Sheffield, Holger Mohr, Hannes Ruge, and Deanna M. Barch***

*Clinical Psychological Science*

Rapid instructed task learning (RITL)—the ability to transform task information into goal-directed behavior without relying on trial-and-error learning—is impaired in patients with schizophrenia. This research indicates that brain connectivity between the cingulo-opercular network (CON) and salience network (SAN) contributes to this impairment in patients with schizophrenia. These findings suggest that impaired interaction between identifying salient stimuli and maintaining goals contributes to RITL impairments in schizophrenia. Altered CON–SAN connectivity might be considered a vulnerability for poor skills learning in the daily life of individuals with schizophrenia.

## **COVID-19 Prevention via the Science of Habit Formation**

***Allison G. Harvey, Courtney C. Armstrong, Catherine A. Callaway, Nicole B. Gumpert, and Caitlin E. Gasperetti***

*Current Directions in Psychological Science*

Harvey and colleagues describe a set of strategies for forming new habits and eliminating existing habits to contain the spread of COVID-19. They highlight eight elements of habit formation that are connected to behavior-changing techniques and are important to understand for habit modification. These elements are addressing incorrect beliefs, setting goals, devising an action plan, establishing contextual cues for the desirable habits, reinforcing desirable habits, repeating desirable habits, aiming for automatic repetition of the behaviors, and recognizing that change is difficult. Strategies to form new habits and eliminate existing habits can be part of a behavioral intervention to promote habit formation for preventing COVID-19.

## **From Objects to Unified Minds**

***Moshe Bar***

*Current Directions in Psychological Science*

Bar presents a framework to describe the human experience. The framework connects objects, associations, contexts, predictions, and affect via an ongoing balance between top-down and bottom-up processes (i.e., higher-order cognitive processes influencing sensorial perception and sensorial perception influencing higher-order cognitive processes, respectively). He proposes that the state of mind, influenced by the balance of top-down and bottom-up processes, orients individuals to the optimal state to meet the needs of the moment. Bar argues that dynamic yet unifying states of mind influence one's mental world to orient dispositions, tendencies, and sensitivities to the demands of specific

circumstances.

## **Invisible Hands and Fine Calipers: A Call to Use Formal Theory as a Toolkit for Theory Construction**

***Donald J. Robinaugh, Jonas M. B. Haslbeck, Oisín Ryan, Eiko I. Fried, and Lourens J. Waldorp***

*Perspectives on Psychological Science*

Meehl (1978) identified several shortcomings in researchers' evaluation of psychological theories. He urged researchers to strengthen theory testing but did not provide the tools necessary to build the rigorous theories his approach required, argue Robinaugh and colleagues. They emphasize the importance of establishing what researchers are aiming for when constructing a theory, and they explain how formal theories might provide useful tools for thinking, evaluating explanations, enhancing measurement, informing theory development, and collaborating in the construction of theories. These tools should make researchers better equipped to advance psychological theory, Robinaugh and colleagues argue.

## **Citation Metrics in Psychological Science**

***Nina Radosic and Ed Diener***

*Perspectives on Psychological Science*

Radosic and Diener analyzed the citation counts for 811 scholars in 30 psychology departments in the United States. They found that most scholars have a low to moderate number of citations, and a few scholars have an extremely high number of citations. A researcher's total number of citations does not appear to be necessarily tied to their department's rank. Citation counts have risen in recent years, especially among early-career scholars. The number of citations at the beginning of one's career predicts lifetime citation success and is associated with obtaining positions at higher-ranked departments.

## **Truth and Advocacy: Reducing Bias in Policy-Related Research**

***Phoebe C. Ellsworth***

*Perspectives on Psychological Science*

Ellsworth discusses the sources of bias in basic and applied research and suggests techniques for counteracting biases in policy-related research specifically. Many scientists who conduct policy-related research study issues they care about, thus leading to strong expectations about study outcomes and their impact on policy. These expectations can bias the evaluation, conduct, and communication of research. Ellsworth highlights several important techniques for reducing bias, including distinguishing between factual claims that are testable and value claims that are not, selecting the testable assumptions that may

underlie various policy positions, and creating repositories of accurate information.

## **Student Motivation and Associated Outcomes: A Meta-Analysis From Self-Determination Theory**

***Joshua L. Howard, Julien Bureau, Frédéric Guay, Jane X. Y. Chong, and Richard M. Ryan***

*Perspectives on Psychological Science*

Intrinsic motivation and behaving on the basis of perceived personal value and meaning appear to be key for school adjustment and student success. In this meta-analysis, Howard and colleagues examined how different types of motivation relate to 26 student outcomes, including performance and well-being. The researchers analyzed 344 samples of students and found that (a) intrinsic motivation was related to students' success and well-being, and (b) personal value (identified regulation) was related with persistence. Ego-involved motivation (introjected regulation) was related with persistence and performance but also with ill-being. Motivation to obtain rewards or avoid punishment was associated only with decreased well-being.

## **The Practical Alternative to the $p$ Value Is the Correctly Used $p$ Value**

***Daniël Lakens***

*Perspectives on Psychological Science*

Lakens argues that discussing which statistics researchers should use instead of the  $p$  value has distracted from the core question of asking researchers what they are hoping to learn when they conduct research. He highlights that preventing the misinterpretation of  $p$  values by developing better evidence-based education and user-centered statistical software should be a priority to improve researchers' statistical inferences. Lakens suggests that pursuing alternatives to  $p$  values is a form of escapism and that a more effective solution would be to educate researchers on how to ask better questions and correctly use the statistics available, including  $p$  values.

## **Analyzing Individual Differences in Intervention-Related Changes**

***Tanja Könen and Julia Karbach***

*Advances in Methods and Practices in Psychological Science*

Könen and Karbach discuss the benefits and limitations of analyzing individual differences in intervention studies in addition to analyzing only group effects. They suggest that analyzing individual differences cannot replace group analyses and provides only correlational and descriptive information about individuals and interventions. Individual-differences analyses can, however, enhance the future implementation of interventions. The researchers also discuss methods for analyzing individual differences and give three examples of latent change models as a framework for analyzing individual



differences in interventions.

## [Assessing Change in Intervention Research: The Benefits of Composite Outcomes](#)



***David Moreau and Kristina Wiebels***

*Advances in Methods and Practices in Psychological Science*

Combining assessments might be a better way to evaluate the effectiveness of interventions than relying on individual measures, recommend Moreau and Wiebels. They argue that composite scores that pool information from single measures into a single outcome can provide better estimates of the underlying constructs of interest while retaining interpretability. The researchers describe different methods to compute, evaluate, and use composite assessments depending on different goals, experimental design, and data. They provide a preregistration template with examples of psychological interventions and the accompanying R code. They also provide a Shiny app and R code, available at [osf.io/u96em](https://osf.io/u96em).

*Feedback on this article? Email [apsobserver@psychologicalscience.org](mailto:apsobserver@psychologicalscience.org) or post a comment.*